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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,377	03/06/2007	Martin Spahn	2003P04495WOUS	6459
22116 7590 09/18/2008 SIEMENS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830				
EXAMINER				
BITAR, NANCY				
ART UNIT		PAPER NUMBER		
2624				
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09/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,377

Applicant(s)

SPAHN, MARTIN

Examiner

NANCY BITAR

Art Unit

2624

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments, in the amendment filed 6/6/2008 with respect to the rejections of claims 13-14, 17-23, 24 under 35 U.S.C. 102(b) and claims 15-16, 22 under 35USC 103(a) have been fully considered but are moot in view of the new ground(s) of rejection necessitated by the amendments. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Besson et al (US 2004/0264626).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 20 teaches "thereby circumventing a direct selecting by the user from the plurality of standard parameter sets". It is unclear what feature or element is being further defined by this claim language, so that the claim fails to clearly point out and distinctly claim applicant's invention. Claims 21-23 are variously dependent from claim 20 and are thus similarly indefinite.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt et al (US 2003/0108154) in view Besson et al (US 2004/0264626).

As to claim 13, Schmitt teaches the method for image refining of digital x-ray images, comprising: providing an image processing module (the selection device can be fashioned as a functional group or as a module in a computer that controls the examination device, paragraph [0011]); supplying to the image processing module a parameter from a current parameter set (paragraph [0022-0024]); displaying an associated model image for a standard parameter set by using a stored image data; and modifying the current parameter set without a user directly selecting the standards parameter set, the modifying performed in response to the user selecting the associate model image wherein the selecting of the associated model image results in the modifying of the current parameter set (paragraph [008-0010]); The image B that is read out from the memory device 31 and that is to be anticipated for the selected examination region 12 and the selected positioning proposal P1, P2, P3 is shown at the right in the lower part of FIG. 2, paragraph [0040]). Note that sample x-ray image preselected in accordance with a user-defined parameter model is displayed to a user, paragraph [0008]). While Schmitt meets a number of the limitations of the claimed invention, as pointed out more fully above, Schmitt fails to specifically teach “modifying the current parameter set without a user directly selecting the standards parameter set, the modifying performed in response to the user selecting the associate model image”. Specifically, Besson et al. teaches a multispectral X-ray imaging system uses a wideband source and filtration assembly to select for M sets of spectral data. Spectral

characteristics may be dynamically adjusted in synchrony with scan excursions where an X-ray source, detector array, or body may be moved relative to one another in acquiring T sets of measurement data. The system may be used in projection imaging and/or CT imaging. Processed image data, such as a CT reconstructed image, may be decomposed onto basis functions for analytical processing of multispectral image data to facilitate computer assisted diagnostics. Moreover, Besson teaches The X-ray source 12 and X-ray detector array 14, as connected by the gantry, define an imaging chain, and are maintained in a defined geometric relationship to one another by means of a gantry. The source-to-detector distance may be varied depending on the examination, and the angle of the imaging chain can be adjusted with respect to the body to be imaged (see also figures 18-20). It would have been obvious to one of ordinary skill in the art to use the modification of module operating parameters of Besson in Schmitt module in order to facilitate computer assisted diagnostics and to enhance parameter selection for optimal performance. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

As to claim 14, Schmitt teaches the method according to claim 13, further comprising: selecting a plurality of standard parameter sets, and creating the current parameter set from the plurality of standard parameter sets (see paragraph [0008], note that the desired examination region can be selected from a number of images stored in the memory device, paragraph [0027]).

As to claim 15, Besson et al teaches the linear combination see figure 2 and paragraph [0156-0162].

As to claim 16, Schmitt teaches the method according to claim 15, wherein the image data for a final image, which is modified in accordance with the associated standard parameter set, is stored for displaying the model image (a modification of the brightness of the image that is read out simulates a modification of the tube current, note that the selection device modifies the image that is read out dependent on an input of a device parameter undertaken at the operating device before the modified image is displayed at the display device, paragraph [0022-0024], see also Besson et al (display,128)).

As to claim 17, Schmitt teaches the method according to claim 14, further comprising storing different parameter sets for different body organs to be examined (different images would also be stored for different settings of a device parameter, paragraph [0022]).

As to claim 18, Schmitt teaches the method according to claim 14, further comprising storing different parameter sets for different acquisition projections (the selection device is configured such that, employing initial data of the sensor, the length ("height"), the thickness and/or the sex of the patient can be evaluated. The selection device, dependent on the evaluation, undertakes the selection of one of the stored images and/or modifies the image that is read out before it is displayed on the display device, paragraph [0026]).

As to claim 19, Schmitt teaches the method according to claim 14, further comprising storing different parameter sets for different generator settings (The device parameter preferably is a tube voltage of the X-ray source, a tube current of the X-ray source, a switching time of the X-ray source and/or a radiation quantity of the X-ray source, paragraph [0023]).

The limitation of claims 20-22 has been addressed above.

Claim 23 differ from claim 1 only in that claim 1 is a method claim whereas; claim 23 is an apparatus claim. Thus, claim 23 is analyzed as previously discussed with respect to claim 1 above.

As to claim 24, Schmitt teaches the apparatus according to claim 23, wherein x-ray detector is a solid-state detector having an active readout matrix made of amorphous silicon (solid state detector, paragraph [0012]).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jing Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nancy Bitar

9/15/2008

/Samir A. Ahmed/
Supervisory Patent Examiner, Art Unit 2624